SAFETY DATA SHEET

Penetone® Corporation, 125 Kingsland Ave., Clifton, NJ 07014

BRAWN™

Date Prepared: September 24, 2019
SDS No.: 1893

SECTION 1: IDENTIFICATION

Product name: BRAWN
Recommended use: Paint stripper and carbon remover
Physcial Description: Light brown/amber viscous liquid with slight solvent odor
Generic Ingredients: Water, potassium hydroxide, glycol ethers, chelate, alcohol, thickener, and surfactant

Manufacturer:
Penetone Corporation
125 Kingsland Ave.
Clifton, NJ 07014
800-631-1652 or 201-567-3000

Business Contact:
Customer Service
800-631-1652 x2602 or 2272
Product Safety
800-631-1652 x2211 or 2257

Emergency Phone Numbers: PENETONE 201-567-3000 CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Health: Skin corrosion: 1B Eye damage: 1 Acute Toxicity - Oral: 4	Specific target organ toxicity - single exposure: 1 **Physical:** Corrosive to metals - 1

DANGER!
Causes Severe Skin Burns and Eye Damage.
Harmful If Swallowed.
Causes Damage to Organs (Gastrointestinal System and Respiratory System If Swallowed)
May Be Corrosive to Metals.

Precautionary Statements:

Prevention:
Do not breathe mists if inhalable mists occur during use. Wear protective gloves, clothing, eye protection, and face protection.
Wash hands and exposed skin thoroughly after handling.
Keep only in original container.

Response:
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Immediately call a poison center, doctor, emergency room, or 911.
Absorb spillage to prevent material damage.

Storage:
Store locked up. Store in corrosive resistant container, plastic (HDPE) is recommended, or container with a resistant inner liner.

Disposal:
Dispose of contents/container in accordance with local,regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	**CAS#**	**Concentration Wt%** (1)
Water	7732-18-5	60-80
Potassium hydroxide	1310-58-3	15-25
Sodium glucoheptonate	31138-65-5	1-10
Polyacrylate	9003-01-4	1-10

Tripropylene glycol methyl ether	20374-33-8	1-10
Ethylene glycol butyl ether	111-76-2	1-10
Methyl alcohol	67-56-1	1-10

(1) Exact percentages being withheld under trade secret provision of OHSA HCS 1910.1200(I)

SECTION 4: FIRST-AID MEASURES

General Description of Symptoms & First-Aid Measures
This product contains potassium hydroxide and is corrosive. It can cause serious burns and extensive tissue destruction if it is not quickly removed. Most likely work-place exposure route will be *skin contact.* This product has a high viscosity which may make it difficult to remove from exposed tissues.

For *skin contact*, a tingling or burning sensation might be felt shortly after exposure. Slight reddening or minor irritation could also develop if the product is not quickly washed off, followed by more severe damage, such as blistering.

Inhalation exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms could include coughing, sneezing, and a tingling or burning sensation in the nose, throat, and lungs. Because of the product's high viscosity, it is unlikely that respirable droplets could be produced. However, such droplets if produced and inhaled would be corrosive to the respiratory tract, especially the upper respiratory tract (nose and throat).

For *eye contact*, a tingling or burning sensation may almost be immediately felt. Immediate action is required to prevent serious eye damage, such as eye lid burns, conjunctivitis, corneal edema, corneal burn, damage to the internal contents of the eye, permanent visual defects, and blindness and/or loss of the eye.

Ingestion of the product may cause an almost immediate tingling or burning sensation followed by more severe pain. Irritation, swelling and perforation of the upper and lower gastrointenstinal tissues may occur if immediate action is not taken. Permanent scarring may occur.

Eyes If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice. Penetone recommends that after any eye exposure a physician be seen immediately.

Ingestion If swallowed: Rinse mouth. DO NOT INDUCE VOMITING. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice.

Inhalation If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a local Poison Control Center, physician, or other competent medical authority for medical advice.

Skin If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used to wash skin. Wash contaminated clothing before reuse. Immediately call a local Poison Control Center, doctor, physician or other competent medical authority for medical advice.

Special Treatment / Other
None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties
Classification: Non-flammable
Flash Point: None-to-boil
Autoignition Temperature: Not determined
Lower Flammable Limit: Not applicable **Upper Flammable Limit:** Not applicable

Specific Hazards

Product is water based and presents no unusual fire hazards. Product may react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

Extinguishing Media
Use extinguishing agents appropriate for controlling surrounding fire.

Unsuitable: None.

Protection & Precautions for Firefighters
Protective Equipment & Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

Fire Fighting Guidance: Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do it safely. Dike fire control water for later disposal; do not scatter material. Containers can expand and explode under fire conditions due to vapor buildup. Always stay away from containers engulfed in fire.

Hazardous Combustion Products: Smoke, fumes, and oxides of carbon, nitrogen, and sulfur when taken to dryness.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill
Adsorb spillage to prevent material damage. Stop leak if you can do so safely. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spill, soak up with absorbent material and place in properly labeled containers for disposal. Neutralize residue with dilute acid and follow with a liberal covering of sodium bicarbonate or other acceptable drying agent.

Water Spill
This is a water based product and will completely mix/dissolve in water. Product is very viscous. Product is much denser than water and will sink. Product viscosity and density may make recovery difficult. This product is caustic and will raise the pH of surface waters. Check with local environmental regulatory agencies for reporting requirements.

See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.

SECTION 7: HANDLING & STORAGE

Handling
Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Do not cut, weld, or reuse empty container.

Storage
Store locked up. Store in corrosive resistant container. Plastic is recommended. If storing in a metal container, it must be NON-ALUMINUM with a resistant inner liner (NOTE: flammable hydrogen gas may be generated if aluminum container and/or aluminum fittings are used). If secondary containers are used, plastic is recommended. Keep container tightly closed when not in use. Do not store near strong bases. Do not store in direct sunlight. Avoid storing above 120^0F (49°C).

SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection

Inhalation A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Use of an organic vapor mask or respirator is recommended.

Skin Wear chemical resistant gloves such as: rubber, nitrile, neoprene, or latex when skin contact is possible. Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn depending on how the product is used. PPE should be cleaned thoroughly after each use.

Eyes Penetone recommends always wearing safety glasses as a minimum in any workplace. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

Occupational Exposure Limits

Component Name	Source	Value	Type	Notation
Potassium hydroxide	ACGIH	2 mg/m^3	Ceiling	
	NIOSH	2 mg/m^3	Ceiling	
Ethylene glycol butyl ether	ACGIH	20 ppm	TWA	A3, BEI
	NIOSH	5 ppm	TWA	skin
	OSHA Z1	50 ppm	TWA	skin
Methyl alcohol	ACGIH	200 ppm	TWA	skin, BEI
		250 ppm	STEL	skin, BEI
	NIOSH	200 ppm	TWA	skin
		250 ppm	STEL	skin
	OSHA Z1	200 ppm	TWA	

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: viscous brown/amber liquid
Odor: mild solvent
Odor Threshold: not determined
pH: >13
Melting Point / Freezing: about 25°F
Boiling Point / Boiling Point Range: about 220°F
Flash Point: above 200°F
Evaporation Rate: equal to water
Flammability: not applicable
Lower Flammable Limit: not applicable
Upper Flammable Limit: not applicable
Explosive Properties: not applicable
Vapor Pressure: equal to water
Relative Vapor Density: equal to water
Relative Density: 1.24
Solubility (Water): soluble
Partition Coefficient (K_{ow}): not determined
Auto-ignition temperature: not determined
Decomposition temperature: not determined

Viscosity: about 30 poise

SECTION 10: STABILITY & REACTIVITY

Reactivity
Product will react with acids, giving off heat.

Chemical Stability
Stable.

Hazardous Reactions
Mixing with acids will give off heat and may cause splattering. Will react with some metals (see below) forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

Conditions to Avoid
Corrosive liquid. Do not store near strong acids.

Incompatible Materials
Strong acids. Soft metals such as aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys.

Hazardous Decomposition Products
Oxides of carbon, nitrogen and sulfur when taken to dryness and burned.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary
This product contains potassium hydroxide and is corrosive. It can cause serious burns and extensive tissue destruction if it is not quickly removed.

Acute Toxicity:

Dermal: No data available

Inhalation: No data available. Corrosive. Because of the product's high viscosity, it is unlikely that respirable droplets could be produced. However, such droplets if produced and inhaled could be corrosive to the respiratory tract, and could cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes.

Oral: LD50 about 1,300 mg/kg rat (estimated using additivity formula). Toxic if swallowed. Corrosive. May cause severe mucous membrane burns and gastrointestinal burns.

Skin Corrosion/Irritation
Corrosive. Causes severe skin burns. Prolonged or repeat skin exposures can result in dermatitis.

Serious Eye Damage/Irritation
Corrosive. Causes serious eye damage which can result in severe irritation, pain and burns, and permanent damage including blindness.

Sensitization - Respiratory or Skin
Based upon component data, not expected to be a skin sensitizer.

Germ Cell Mutagenicity
No data available.

Carcinogenicity
Ethylene glycol butyl ether is listed by ACGIH as Group A3: confirmed animal carcinogen with unknown relevance to

humans.

Developmental/Reproductive Toxicicty
Ethylene glycol butyl ether has been toxic to the fetus in lab animals at doses toxic to the mother. Effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Specific Target Organ Effects - Single Exposure
No data available.

Specific Target Organ Effects - Repeated or Prolonged Exposure
Ethylene glycol butyl ether has caused effects on the blood (hemolysis) and kidney and liver effects in lab animals. Small but statistically significant increases in tumors were observed in mice but not rats. These effects are not believed to be relevant to humans.

Aspiration Hazard
Although potassium hydroxide poses an aspiration hazard, because of this product's high viscosity, product not expected to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary
This material is caustic and will raise the pH of surface waters. Product should be nontoxic to aquatic organisms.

Ecotoxicity
Freshwater Fish: LC50 100-500 mg/l (estimated using additivity formula)
Invertebrates: EC50 100-500 mg/l (estimated using additivity formula)
Algae: ErC50 100-500 mg/l (estimated using additivity formula)

Persistence and Degradability
Potassium hydroxide will dissociate into its ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize it. The organic materials in this product are all readily biodegradable.

Bioaccumulative Potential
Bioaccumulation potential of the materials used in this product are low.

Mobility in soil
Mobility is high.

Other Adverse Effects
Potassium hydroxide has exhibited slight toxicity to terrestrial organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a D002 Corrosive Hazardous Waste under RCRA definitions. Dispose of contents/container in accordance with all applicable federal, state, and local regulations.

Note: Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Appropriate hazardous waste designation is the responsibility of the user.

SECTION 14: TRANSPORT INFORMATION

ID No.:	UN1814
Proper Shipping Name:	POTASSIUM HYDROXIDE, solution
Hazard Class:	8

Packing Group: II
Label: CORROSIVE
Marine Pollutant: No
RQ: 1,000 lbs for potassium hydroxide CAS# 1310-58-3 or about 5,000 lbs (about 485 gallons) of product
5,000 lbs for methyl alcohol CAS# 67-56-1 or about 350,000 lbs (about 34,000 gallons) of product
Special Precautions: None

SECTION 15: REGULATORY INFORMATION

TSCA
The ingredients in this product are listed on the TSCA inventory.

RCRA HAZARD CLASS
D002 - Corrosive hazardous waste

SARA 311/312 REPORTABLE HAZARD CATEGORIES: Immediate (Acute) Health

REPORTING REQUIREMENTS (all quantities in pounds)

Component	CAS / 313 Code	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ (1)	Section 313	CAA 112(r) TQ	CWA / OPA
Potassium hydroxide	1310-58-3			1,000			
product RQ for component				5,000 450 gal			
Methyl alcohol	67-56-1			5,000	313		
product RQ for component				350,000 34,000 gal			
Ethylene glycol butyl ether	N230			(2)	313		
	(1) Releases exceeding the RQ just be reported to the National Response Center, 800-424-8802 and may be subject to state and local reporting. (2) CERCLA hazardous substance with no assigned RQ						

NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains water (CAS# 7732-18-5), potassium hydroxide (CAS# 1310-58-3), sodium glucoheptonate (CAS# 31138-65-5), starch (CAS# 9005-25-8), tripropylene glycol monomethyl ether (CAS# 20374-33-8), ethylene glycol butyl ether (CAS# 111-76-2), and methyl alcohol (CAS# 67-56-1).

CALIFORNIA PROPOSITION 65 INFORMATION
This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION
Is there a photochemically reactive material present? No
What is the % by volume of photochemically reactive material? 0
What is the VOC content? About 80 g/l
What is the vapor pressure of VOC's? Less than 2 mm Hg @ 20°C

SECTION 16: OTHER INFORMATION

REVISION SUMMARY
Change in Section 1

SUPERSEDES ISSUE DATE
April 21, 2017

HAZARD RATING SYSTEMS:

	HMIS	NFPA
HEALTH	3	3
FLAMMABILITY	0	0
REACTIVITY	0	0
	B	

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000